1. (Currently Amended) ~~A computer system which includes an apparatus for monitoring the performance of a multithreaded processor, said~~ An apparatus, comprising:

    a processor ~~adapted~~ to execute a plurality of threads simultaneously, each thread including a series of instructions;

    an event detector to detect a predetermined list of events and to transmit an event detection signal to a multiplexer;

    an event selection control register (ESCR) to instruct the multiplexer to select an event from the predetermined list of events by qualifying the event based on a set of conditions;

    ~~a plurality of programmable~~ an event ~~counters~~ counter to count the event qualified by the multiplexer~~two or more independent events generated by one or more threads of said plurality, said two or more events selected from a predetermined list of events resulting from the normal operation of said processor;~~

    ~~one or more registers to control the operation of said event counters, each register also selecting the events to be counted from said list of events;~~ and

    an access location to allow access to ~~said~~ the event ~~counters~~ counter to determine a current count of ~~said events~~ the event.

2. (Currently Amended) The ~~computer system~~ apparatus of claim 1, wherein ~~said~~ the access location allows access to determine ~~said~~ the count without disturbing the operation of ~~said counters~~ event counter.

3.	(Currently Amended) The ~~computer system~~ apparatus of claim 2, wherein ~~each register~~ the ESCR comprises a first field of bits ~~for choosing one or more events~~ to choose the event to be counted.

4.	(Currently Amended) The ~~computer system~~ apparatus of claim 3, wherein ~~each register~~ the ESCR further comprises a second field of bits ~~for choosing one or more events~~ to choose the event to be masked and not counted.

Claims 5-6 (Cancelled)

7.	(Currently Amended) The ~~computer system~~ apparatus of claim ~~6~~1, wherein ~~said counters~~ the event counter is ~~can be~~ stopped and cleared before a new event is selected.

8.	(Currently Amended) The ~~computer system~~ apparatus of claim 7, wherein ~~said counters~~ the event counter is ~~can be~~ preset to a certain state.

9.	(Currently Amended) The ~~computer system~~ apparatus of claim ~~5~~1, wherein ~~said~~ the predetermined list of events includes hardware performance and breakpoint events.

Claims 10-17 (Cancelled)

18.	(Currently Amended) A method, ~~for monitoring the performance of a multithreaded processor, said method~~ comprising:

executing a plurality of threads simultaneously, each thread including a series of instructions;

detecting a predetermined list of events and transmitting an event detection signal to a multiplexer;

instructing the multiplexer to select an event from the predetermined list of events by qualifying the event based on a set of conditions;

counting ~~a plurality of independent events generated by one or more threads~~ ~~of said plurality, said plurality of events selected from a~~ ~~predetermined list of events resulting from the normal operation of~~ ~~said processor~~ the event qualified by the multiplexer using an event counter;

~~controlling the operation of said event counters, each register also selecting~~ ~~the events to be counted from said list of events;~~ and

accessing ~~said event counters~~ the event counter to determine a current count of ~~said~~ ~~events~~ the event.

19. (Cancelled)

20. (Currently Amended) The method in claim ~~19~~ 18, wherein ~~said~~ the qualifying of the event includes requiring that ~~said plurality of events have~~ the event has a preselected thread ID.

21. (Currently Amended) The method in claim 20, wherein ~~said~~ the qualifying of the event further includes requiring that ~~said plurality of events have~~ the event has a preselected thread current privilege level (CPL).

Claims 22-24 (Cancelled)

25. (New) The apparatus of claim 1, wherein the qualifying of the event is performed using a thread ID and a thread current privilege level (CPL).

26. (New) The apparatus of claim 25, wherein the thread ID indicates a source of the event, the source include a thread of the plurality of threads where the event occurred.

27.   (New) The apparatus of claim 25, wherein the thread CPL indicates a privilege level at which the thread at which the event occurred was operating when the event occurred.

28.   (New) The method of claim 20, wherein the preselected thread ID represents a thread of the plurality of threads where the event occurred.

29.   (New) The method of claim 21, wherein thread CPL indicates a privilege level at which the thread was operating at when the event occurred.